

IN THE CLAIMS

We claim:

1. An apparatus comprising:
 - a platen;
 - a polishing pad disposed over said platen;
 - a slurry dispenser disposed over said polishing pad;
 - a cathode connected electrically to said polishing pad;
 - a wafer carrier disposed over said polishing pad;
 - an anode connected electrically to said wafer carrier; and
 - a power supply connected to said anode and said cathode.
2. The apparatus of claim 1 wherein said platen is capable of motion.
3. The apparatus of claim 1 wherein said wafer carrier is capable of motion.
4. The apparatus of claim 1 wherein said platen includes coils that are connected to a chiller or heater.
5. The apparatus of claim 1 wherein said wafer carrier includes coils that are connected to a chiller or heater.
6. The apparatus of claim 1 wherein said cathode is disposed towards a periphery of said platen.
7. The apparatus of claim 1 wherein said cathode is segmented.

8. The apparatus of claim 1 wherein said cathode is disposed between said platen and said polishing pad.

9. An apparatus comprising:

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a polishing pad;
a slurry disposed on said polishing pad;
a wafer disposed on said polishing pad and said slurry; and
a power supply adapted to apply a voltage or a current between said polishing pad and said wafer.

10. The apparatus of claim 9 wherein said wafer comprises a metal surface layer.

11. A method comprising:

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providing a wafer, said wafer having a surface layer;
removing said surface layer with a polishing pad;
removing said surface layer with a slurry; and
removing said surface layer with an electrical current.

12. The method of claim 11 wherein said surface layer comprises a metal.

13. The method of claim 11 wherein said slurry comprises alumina.

14. The method of claim 11 wherein said slurry comprises silica.

15. The method of claim 11 wherein said slurry comprises an oxidizer.